

ABSTRACT

A light-shielding film pattern 2a having a main opening 5 and auxiliary openings 6 is formed in a first process and, then, recess etching of a transparent substrate (formation of a substrate etched portion 8) is performed in a second process. Thus, the main opening and auxiliary openings can be simultaneously exposed in the first process and the positioning accuracy of them becomes excellent. Patterning of a light-shielding film 2 is performed by the use of an etching mask layer 3a and therefore the processing accuracy of the light-shielding film becomes excellent. The etching mask layer 3a is removed in a third process as the final process and thus the light-shielding film pattern 2a can be protected by the etching mask layer 3a upon recess-etching the transparent substrate in the second process. Thus, it is possible to prevent damage to the light-shielding film pattern 2a in the recess etching of the transparent substrate. Specifically, the etching mask layer 3a itself is damaged in the recess etching of the transparent substrate and this etching mask layer 3a is removed in the third process, causing no problem.